UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/481,388	01/12/2000	Jeffrey Dwork	52352-310	5577

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EXAMINER
PATEL, NIKETA I

ART UNIT	PAPER NUMBER
2182	6

DATE MAILED: 12/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/481,388	DWORK, JEFFREY
	Examiner	**Art Unit**
	Niketa I. Patel	2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>09/04/2003</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13 and 15-20* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13 and 15-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a)☐ All b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
         application from the International Bureau (PCT Rule 17.2(a)).
   * See the attached detailed Office action for a list of the certified copies not received.

13)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application)
   since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.
   37 CFR 1.78.
   a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific
   reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)   4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   5) ☐ Notice of Informal Patent Application (PTO-152)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .   6) ☐ Other: .

DETAILED ACTION

Claim Objections

1.   Claim 12 objected to because of the following informalities: line 2 recites "to a *first*

address **first address** signal"; it should recite "to a *first address* signal". Appropriate correction

is required.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

3.   Claims 1-13 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Watkins U.S. Patent Number: 6,049,857 (hereinafter referred to as *"Watkins"*) and further in

view of Hansen U.S. Patent Number: 6,101,590 (hereinafter referred to as *"Hansen"*.)

4.   **Referring to claims 1, 18,** *Watkins* teaches a data processing system operable with at

least two type of software, the system comprising: a host interface for providing address, data

and control signals from a host [see figure 2A – elements 210i-j;column 6 – lines 36-48], a

storage element for holding data accessible via the host interface [see figure 2A – element 220],

and alternate access circuitry for providing access to the storage element [see column 5 – lines

10-16, 58-61; column 6 – lines 7-16; 'address translation unit'] however, fails to set forth the

limitation of providing access to the storage element so as to access the data as a first data

element in a first register when the system operates with a first type of software, and as a second

data element in the second register when the system operates with a second type of software.

Hansen teaches an alternate access circuitry for providing access to the storage element so as to

access the data as a first data element in a first register when the system operates with a first type

of software, and as a second data element in the second register when the system operates with a

second type of software [see *Hansen* column 2 – lines 45-51, 'each of the tasks are different

software'; column 4 – lines 45-57; column 5 – lines 30-54] resulting in a system which allows

multiple programs to simultaneously share a computer system's main memory and increases the

overall efficiency and flexibility of the system.

One of ordinary skill in the art at the time of applicant's invention would have clearly

recognized that it is quite advantageous for the processing system of *Watkins* to allow multiple

programs to simultaneously share a computer system's main memory. It is for this reason that

one of ordinary skill in the art would have been motivated to substitute *Watkins's* alternate

access circuitry with an access circuitry, which allows an access to a storage location based on

the type of software that is running on the system, in order to allow multiple programs to

simultaneously share a computer system's main memory and increases the overall efficiency and

flexibility of the system.

5.   **Referring to claim 2,** the system of *Watkins* as modified by the teachings of *Hansen*, as

applied to claim 1 above, teaches that the alternate access circuitry is configured to perform

writing data into the storage element in response to a first address signal supplied from the host

interface to access the first register, when the system operates with the first type of software [see

Hansen column 9 – lines 10-24.]

6.   **Referring to claim 3**, the system of *Watkins* as modified by the teachings of *Hansen*, as

applied to claim 1 above, teaches that the alternate access circuitry is configured to perform

writing data into the storage element in response to a second address signal supplied from the

host interface to access the second register, when the system operates with the second type of

software [see *Hansen* column 9 – lines 10-24.]

7.   **Referring to claim 4**, the system of *Watkins* as modified by the teachings of *Hansen*, as

applied to claim 1 above, teaches that the alternate access circuitry is configured to perform

reading data from the storage element in response to a first address signal supplied from the host

interface to access the first register, when the system operates with the first type of software [see

Hansen column 9 – lines 10-24.]

8.   **Referring to claim 5**, the system of *Watkins* as modified by the teachings of *Hansen*, as

applied to claim 1 above, teaches that the alternate access circuitry is configured to perform

reading data from the storage element in response to a second address signal supplied from the

host interface to access the second register, when the system operates with the second type of

software [see *Hansen* column 9 – lines 10-24.]

9.   **Referring to claims 6, 7, 8, 9, 10**, the system of *Watkins* as modified by the teachings of

Hansen, as applied to claim 1 above, teaches an alternate access circuitry, however fails to set

forth the limitation of the alternate access circuitry comprises a writing multiplexer having a first

input for supplying the first data element to the storage element when the system operates with

the first type of software, and a second input for supplying the second data element to the storage

element when the system operates with the second type of software and a first and second select

signals supplied from the host to control the multiplexer to access the first and second registers.

It would have been obvious to one of ordinary skill in the art at the time of applicant's

invention that it was old and well known in the computer art to use multiplexer as a switching

element in order to implement switching of two or more signals using hardware components

rather then software. It would have been obvious to one of ordinary skill in the art at the time of

applicant's invention to implement switching of two signals using multiplexer in order to save

software resources.

10.   **Referring to claim 11**, the system of *Watkins* as modified by the teachings of *Hansen*, as

applied to claim 1 above, teaches that the alternate access circuitry comprises a first reading gate

coupled to the storage element for outputting the first data element when the system operates

with the first type of software, and a second reading gate coupled to the storage element for

outputting the second data element when the system operates with the second type of software

[see *Hansen* column 4 – lines 45-57; column 9 – lines 10-24.]

11.   **Referring to claim 12**, the system of *Watkins* as modified by the teachings of *Hansen*, as

applied to claim 1 above, teaches that the first reading gate is configured to output the first data

element in response to a first address signal supplied from the host interface to access the first

register [see *Hansen* column 4 – lines 45-57; column 9 – lines 10-24.]

12.   **Referring to claim 13**, the system of *Watkins* as modified by the teachings of *Hansen*, as

applied to claim 1 above, teaches that the second reading gate is configured to output the second

data element in response to a second address signal supplied from the host interface to access the

second register [see *Hansen* column 4 – lines 45-57; column 9 – lines 10-24.]

13.   **Referring to claim 15,** *Watkins* teaches a network interface comprising: a host interface

for supplying address, data and control signals from a host [see figure 2A – elements 210i-

j;column 6 – lines 36-48], a storage element for holding a data element accessible via the host

interface [see figure 2A – element 220], and alternate access circuitry coupled to the storage

element for providing multiple paths for accessing the data element [see column 5 – lines 10-16,

58-61; column 6 – lines 7-16; 'address translation unit'] however, fails to set forth the limitation

of configured to select a path for accessing the data element depending on a type of software

used to operate the network interface. *Hansen* teaches alternate access circuitry for providing

access to the storage element depending on a type of software used to operate the network

interface [see *Hansen* column 2 – lines 45-51, 'each of the tasks are different software'; column

4 – lines 45-57; column 5 – lines 30-54] resulting in a system which allows multiple programs to

simultaneously share a computer system's main memory and increases the overall efficiency and

flexibility of the system.

One of ordinary skill in the art at the time of applicant's invention would have clearly

recognized that it is quite advantageous for the processing system of *Watkins* to allow multiple

programs to simultaneously share a computer system's main memory. It is for this reason that

one of ordinary skill in the art would have been motivated to substitute *Watkins's* alternate

access circuitry with an access circuitry, which allows an access to a storage location based on

the type of software that is running on the system, in order to allow multiple programs to

simultaneously share a computer system's main memory and increases the overall efficiency and

flexibility of the system.

14.   **Referring to claim 16**, the system of *Watkins* as modified by the teachings of *Hansen*, as

applied to claim 15 above, teaches that the path for accessing the data element is allocated in

response to an address signal supplied from the network interface to access a predetermined

register, when a selected type of software is used to operate the network interface [see *Hansen*

column 2 – lines 45-51, 'each of the tasks are different software'; column 4 – lines 45-57;

column 5 – lines 30-54.]

15.   **Referring to claim 17**, the system of *Watkins* as modified by the teachings of *Hansen*, as

applied to claim 15 above, teaches that the selected type of software requires the data element to

be held in the predetermined register [see *Hansen* column 2 – lines 45-51, 'each of the tasks are

different software'; column 4 – lines 45-57; column 5 – lines 30-54.]

16.   **Referring to claim 19**, the system of *Watkins* as modified by the teachings of *Hansen*, as

applied to claim 15 above, teaches that the first access path is allocated is response to a first

address signal identifying a first register required by the first type of software to hold the data

element [see *Hansen* column 2 – lines 45-51, 'each of the tasks are different software'; column 4

– lines 45-57; column 5 – lines 30-54.]

17.   **Referring to claim 20**, the system of *Watkins* as modified by the teachings of *Hansen*, as

applied to claim 15 above, teaches that the second access path is allocated in response to a

second address signal identifying a second register required by the second type of software to

hold the data element [see *Hansen* column 2 – lines 45-51, 'each of the tasks are different

software'; column 4 – lines 45-57; column 5 – lines 30-54.]

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Niketa I. Patel whose telephone number is (703) 305 4893. The

examiner can normally be reached on M-F 8:00 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jeffrey A. Gaffin can be reached on (703) 308 3301. The fax phone number for the

organization where this application or proceeding is assigned is (703) 872 9306.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 305 3900.

NP
11/24/2003

JEFFREY GAFFIN
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